PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):   Mark S. Moir et al.

Title: OBSTRUCTION-FREE MECHANISM FOR ATOMIC UPDATE OF
                  MULTIPLE NON-CONTIGUOUS LOCATIONS IN SHARED MEMORY

Application No.: 10/620,747   Filed: July 16, 2003

Examiner: Unassigned   Group Art Unit: 2125

Atty. Docket No.: 004-8515

September 27, 2004

Mail Stop Amendment
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☒   Form(s) PTO-1449 (2 pages), including copy(ies) of 33 reference(s).
☐   Other: n/a

to the Examiner's attention in the above-identified application. Citation of such information shall not be construed as:

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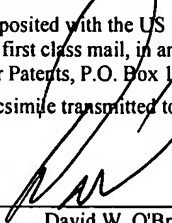
For each item of information listed that is not in the English language, the undersigned has provided a concise explanation of the relevance through (i) an English language abstract, (ii) an English language equivalent application, or (iii) if cited in a search report or other action

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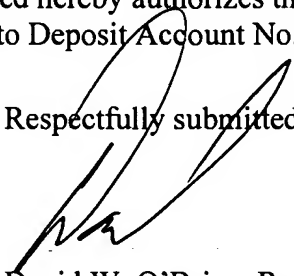
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☐   This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) or within three months of entry of the national stage as set forth in § 1.491 in an international application. Therefore, no fee is required.

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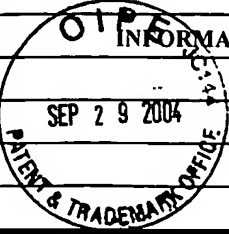
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David W. O'Brien   Date

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Respectfully submitted,

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U.S. Department of Commerce, Patent and Trademark Office		Attorney Docket No.:	*004-8515*
		Application No.:	*10/620,747*
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant(s):	*Moir et al.*
(Use several sheets if necessary)		Filing Date:	*July 16, 2003*
		Group Art Unit:	*2125*
		Date Submitted:	*September 27, 2004*

(Stamp: O.I.P.E. SEP 2 9 2004 PATENT & TRADEMARK OFFICE)

NON PATENT LITERATURE DOCUMENTS

*Examiner Initial	Cite No.	(Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.)
	1	Afek, Yehuda et al., *"Long-Lived Renaming Made Adaptive"*, 18th Annual ACM Symposium on Principles of Distributed Computing, pages 91-104, 1999.
	2	Afek, Yehuda, *"Wait-Free Made Fast"*, 27th Annual ACM Symposium on Theory of Computing, pages 538-547, 1995.
	3	Agesen, Ole et al., *"DCAS-Based Concurrent Deques"*, 12th Annual ACM Symposium on Parallel Algorithms and Architectures, pages 137-146, July 2000.
	4	Anderson, James H. et al., *"Using Local-Spin k-Exclusion Algorithms to Improve Wait-Free Object Implementations"*, 12th Annual ACM Symposium on Principles of Distributed Computing, November 1995 (revised 1996, 1997).
	5	Arora, Nimar S. et al., *"Thread Scheduling for Multiprogrammed Multiprocessors"*, 10th Annual ACM Symposium on Parallel Algorithms and Architectures, pages 119-129, 1998.
	6	Attiya, Hagit et al., *"An Adaptive Collect Algorithm with Applications"*, Dept. of Computing Science, The Technion, Israel, May 10, 2001.
	7	Barnes, Greg, *"A Method for Implementing Lock-Free Shared Data Structures"*, 5th Annual ACM Symposium on Parallel Algorithms and Architectures, pages 261-270, 1993.
	8	Bayer, R. et al., *"Concurrency of Operations on B-Trees"*, Acta Informatica, 1977.
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	10	Detlefs, David L. et al., *"Lock-Free Reference Counting"*, 20th Annual ACM Symposium on Principles of Distributed Computing, pages 190-199, 2001.
	11	Dice, David et al., *"Mostly Lock-Free Malloc"*, ACM 2002.ACM SIGPLAN International Symposium on Memory Management, June 2002.
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	13	Herlihy, Maurice, *"A Methodology for Implementing Highly Concurrent Data Objects"*, ACM Transactions on Programming Languages and System, pages 745-770, November 1993.
	14	Herlihy, Maurice, *"Dynamic-Sized Lockfree Data Structures"*, Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.
	15	Herlihy, Maurice et al., *"Linearizability: A Correctness Condition for Concurrent Objects"*, ACM Transactions on Programming Languages and Systems, pages 463-492, July 1990.
	16	Herlihy, Maurice et al., *"The Repeat Offender Problem: A Mechanism for Supporting Dynamic-Sized Lock-Free Data Structures"*, Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.

Examiner	Date Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

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U.S. Department of Commerce, Patent and Trademark Office	Attorney Docket No.:	*004-8515*
	Application No.:	*10/620,747*
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Applicant(s):	*Moir et al.*
(Use several sheets if necessary)	Filing Date:	*July 16, 2003*
	Group Art Unit:	*2125*
	Date Submitted:	*September 27, 2004*

NON PATENT LITERATURE DOCUMENTS

*Examiner Initial	Cite No.	(Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.)
	17	Herlihy, Maurice et al., "*Transactional Memory: Architectural Support for Lock-Free Data Structures*", 20th International Symposium in Computer Architecture, 1993.
	18	Herlihy, Maurice et al., "*Obstruction-Free Synchronization: Double-Ended Queues as an Example*", 23rd International Conference on Distributed Computing, May 2003.
	19	Israeli, Amos et al., "*Disjoint-Access-Parallel Implementations of Strong Shared Memory Primitives*", 13th Annual ACM Symposium on Principles of Distributed Computing, pages 151-160, 1994
	20	Lamport, Leslie, "*How to Make a Multiprocessor Computer that Correctly Executes Multiprocess Programs*", IEEE Transactions on Computers, September 1979.
	21	Luchangco, Victor et al., "*Nonblocking k-compare-single-swap*", 15th Annual ACM Symposium on Parallel Algorithms and Architectures, June 2003.
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	23	Michael, Maged M. et al., "*Non-Blocking Algorithms and Preemption-Safe Locking on Multiprogrammed Shared Memory Multiprocessors*", Journal of Parallel and Distributed Computing, March 1997.
	24	Michael, Maged M. et al., "*Simple, Fast and Practical Non-Blocking and Blocking Concurrent Queue Algorithms*", 15th Annual ACM Symposium on Principles of Distributed Computing, pages 267-276, 1996.
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	26	Moir, Mark, "*Laziness Pays! Using Lazy Synchronization Mechanisms to Improve Non-Blocking Constructions*", 19th Annual ACM Symposium on Principles of Distributed Computing, 2000.
	27	Moir, Mark, "*Practical Implementations of Non-Blocking Synchronization Primitives*", 16th Annual ACM Symposium on Principles of Distributed Computing, 1997.
	28	Moir, Mark, "*Transparent Support for Wait-Free Transactions*", 11th International Workshop on Distributed Algorithms, 1997.
	29	Moir, Mark et al., "*Wait-Free Algorithms for Fast, Long-Lived Renaming*", Science of Computer Programming, August 1994.
	30	Saks, Michael et al., "*Optimal Time Randomized Consensus - Making Resilient Algorithms Fast in Practice*", 2nd ACM SIAM Symposium on Discrete Algorithms, pages 351-362, 1991.
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	32	Trieber, R, "*Systems Programming: Coping with Parallelism*", IBM Technical Report RJ5118, April 23, 1986.
	33	Turek, John et al., "*Locking without Blocking: Making Lock Based Concurrent Data Structure Algorithms Nonblocking*", 11th ACM *SIGACT-SIGMOD-SIGART* Symposium on Principles of Database Systems, 1992.

Examiner	Date Considered

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